

## **REMARKS**

The Office Action dated September 22, 2004 has been received and carefully studied.

The Examiner rejects claims 1, 2, 4-6 and 9 under 35 U.S.C. §102(b) as being anticipated by admitted prior art shown in Figure 5 of the application. The Examiner states that the admitted prior art teaches a medical laser system comprising at least a plurality of laser sources, a laser beam multiplexing means for superimposing the laser beams emitted from the laser sources, and a beam mixing means wherein the laser beams from the multiplexing means enter.

By the accompanying amendment, claim 1 has been amended to recite that the beam mixing means is an optical fiber for reflecting laser beams by multireflection inside the optical fiber, and to recite a condenser lens for focusing and entering the laser beams from the beam mixing means to an optical fiber for propagation, and to recite the relation of the laser beam emitted from the laser device. Support for the amendment can be found at page 6, last paragraph, to page 8, first full paragraph, for example.

Figure 5 of the instant application does not disclose or suggest the laser device as now claimed.

The Examiner also rejects claims 1, 2, 4-6 and 9 under 35 U.S.C. §102(b) as being anticipated by Ota, U.S. Patent No. 6,110,165, and claim 3 under 35 U.S.C. §103(a) as being unpatentable over Ota in view of known prior art. The Examiner states that Ota teaches a medical laser system comprising a plurality of laser sources 1, 2 and 7, a laser beam multiplexing means 3, 4, 6 for superimposing the laser beams emitted from the

laser sources, a beam condensing means 8, and a beam mixing optical fiber 9 wherein the laser beams from the multiplexing means enter. With respect to claim 3, the Examiner notes that the use of a waveguide to transmit optical energy is well known.

The present invention as now claimed includes an optical fiber for mixing which is used as a beam mixing means and an optical fiber for propagation which guides a mixed laser beam to a predetermined point. The optical fiber for mixing emits the laser beams by mixing the incident laser beams so that the beam quality of the laser beam has the relation  $10 \leq M^2 \leq 22$ . This prevents the occurrence of speckles in light intensity distribution at a projected point.

Ota relates to an apparatus for laser treatment. Ota shows an optical fiber 9 for guiding a laser light to a predetermined point. The optical fiber 9 corresponds to the optical fiber for propagation of the present invention. However, Ota does not disclose or suggest that the laser lights are mixed and that mixing prevents the occurrence of speckles in the light intensity distribution. No mixing means and no optical fiber as a beam mixing means is disclosed or suggested.

The Examiner rejects claims 1, 5 and 8 under 35 U.S.C. §102(b) as being anticipated by Deckelbaum et al., U.S. Patent No. 5,350,375. The Examiner states that Deckelbaum et al. disclose a medical laser system comprising a plurality of laser sources 20, 70, a laser beam multiplexing means 32 for superimposing the laser beams emitted from the laser sources, and a beam mixing means wherein the laser beams from the multiplexing means enter.

Deckelbaum et al. relate to a medical system using a laser light. A laser catheter incorporating an optical fiber is shown. However, the laser catheter is used for guiding


a laser light to a required point, it is not used for mixing the laser light. Accordingly Deckelbaum et al. also do not disclose or suggest a mixing means or an optical fiber as a beam mixing means as recited in the instant claims as amended.

New claims 10-12 have been added to further define the invention.

The remaining prior art is believed to have been properly not relied upon in rejecting any claim.

Reconsideration and allowance are respectfully requested in view of the foregoing.

Respectfully submitted,

  
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